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Dear Mr. Kelly:

This letter is in response to your objection, dated September 27, 2013 of the Red Mountain Flume Chessman Reservoir Project located on the Helena National Forests. I have read your objection on behalf of Montana Ecosystems Defense Council and Native Ecosystems Council. I have reviewed the Environmental Assessment (EA), and the analysis in the project record (as of the objection date), and I understand the disclosed environmental effects. I have also considered the comments submitted during the public scoping for this project. My review was conducted in accordance with 36 CFR 218.

On December 21, 2011, President Obama signed into law the Consolidated Appropriations Act of 2012, which directs the Secretary of Agriculture to provide for a pre-decisional objection process based on Section 105(a) of the Healthy Forest Restoration Act of 2003 (HFRA) (16 U.S.C. 6515(a)) for projects and activities implementing land management plans and documented with a Record of Decision or Decision Notice. The Act further directs that these procedures be applied in lieu of 36 CFR 215 that provided for a post-decisional administrative appeal process for projects and activities implementing land management plans. The Department has developed the final rule at 36 CFR 218 to: (1) Preserve the pre-decisional objection process already in place for proposed hazardous fuel reduction projects authorized under the HFRA; (2) expand the scope of that objection process to include other covered actions; and (3) establish a process for providing the notice and comment provisions of the Appeal Reform Act.

On August 19, 2013, then-acting Helena National Forest Supervisor Bill Avey released a draft Decision Notice and draft Finding of No Significant Impact for the Red Mountain Flume Chessman Reservoir Project on the Helena Ranger District. The purpose of the project is to reduce the likelihood of physical damage to the municipal watershed infrastructure (flume and reservoir) in the event of a wildfire or from falling dead trees. It had been determined through internal analysis and discussion with interest groups such as the city of Helena and the Ten Mile Watershed Collaborative Committee that concerns for the flume and reservoir should be addressed immediately. The project is needed to:

- Remove standing vegetation and high fuel loadings along the Red Mountain Flume in order to lower the risk of damage to infrastructure from wildfire effects, post-fire effects, and probable direct damage from falling trees.

- Remove dead and dying trees, and lower the surface fuel loading and density of live trees near Chessman Reservoir in order to reduce risk of a severe wildfire, which could lead to post-fire erosion, sedimentation, and ash flow to the reservoir.

In addition to the above proposed treatments, analysis for the project indicated a need to do a site-specific, project-specific amendment to the 1986 Helena National Forest Plan for lands encompassed by the Red Mountain Flume Chessman Reservoir Project with regards to elk hiding cover and security.

The regulations at 36 CFR 218 provide for a pre-decisional administrative review process in which the objector provides sufficient narrative description of the project, specific issues related to the project, and suggested remedies that would resolve the objection (36 CFR 218.8). The regulations also allow for the parties to meet in order to resolve the issues. On November 5, 2013, the District Ranger, Forest Supervisor, representatives of the interdisciplinary team (IDT), and I, met with you, Native Ecosystems Council, members of the Ten Mile Watershed Collaborative Committee, and the City of Helena and discussed your concerns about the project and analysis. I believe we discussed the subjects that were most important to you, but we were unable to resolve your objection or any of the specific points contained within it.

The Responsible Official and I have reviewed the project in light of the issues presented in your objection letter. I have considered your issues in the following two categories: 1) violation of environmental laws, regulations, and policy; and 2) 36 CFR 218-specific concerns related to this project. I noted that you did provide a general remedy to your objections. You asked the Deciding Official to select the No Action Alternative, withdraw the Environmental Analysis, and prepare an Environmental Impact Statement for the project.

ISSUE REVIEW

Issue 1: The Forest Service amendment fails to comply with NEPA and NFMA and the Clean Water Act.

Issue 1, Contention a & b: The Forest Service may propose and implement amendments to a forest plan in a process complying with NEPA and NFMA. For each proposal for a plan amendment, the responsible official must complete analyses and public involvement in accordance with Forest Service NEPA in order to provide opportunities for collaboration.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The Forest did collaborate. They worked with the Ten Mile watershed collaborative committee on the development of the project. The Forest Plan amendment is a site-specific amendment that is part of this project and not a separate, stand-alone amendment. The amendment is necessary to meet the goals of the project. Additionally, the public had an

opportunity to comment on the proposed Forest Plan amendment during the notice and comment period for the EA.

The forest plan amendment complies with NFMA and NEPA by following the procedures outlined in the 2012 Planning Rule (36 CFR 219). The transition section of this rule (36 CFR 219.17(b)(3)) provides for completing Forest Plan amendments as outlined under the prior planning rule, in this case the 1982 rule.

The 1982 regulations at 219.10(f) help to determine whether or not a proposed amendment would result in a significant change in the Plan. Further factors considered in this determination were derived for Forest Service Manual section 1926.5. The draft plan amendment was available for public review in Appendix A of the Preliminary Environmental Document during the 30-Day Comment Period, as Appendix A in the Environmental Assessment, and as Appendix B of the Draft Decision Notice during the Objection Period. Furthermore, the Helena Forest Plan (p. II/14, standard 3) states "If it is determined during project design that the best way to meet the management area goals of the Forest Plan conflicts with the Forest Plan standard, the Forest Supervisor may approve an exception to the standard for the project; such exceptions and the rationale therefore must be described in the project's documentation."

The analysis and the proposed decision are in compliance with the Clean Water Act (DN/FONSI, p. 15), NEPA, and NFMA.

Issue 1, Contention c: NFMA requires that an amendment provide for the diversity of wildlife be based on the best available science.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The proposed amendment is a one-time, site-specific and project-specific exception applicable only to implementation of the decision for the Red Mountain Flume/Chessman Reservoir Project [Draft Decision Notice, pp.1, 8, 11; Draft Decision Notice, Appendix B, p. 1]. The Forest is not replacing the existing Forest Plan standard.

The best available data—i.e. the most recent Montana Department of Fish, Wildlife and Parks elk survey data—were utilized to determine that the proposed amendment would not compromise the ability of the Helena National Forest to provide big game security, which is the intent of Forest Plan Big Game Standard 4(a) [Draft Decision Notice, Appendix B, pp. 9-11 and Table 7].

This amendment is permitted by the Helena National Forest Plan (USDA 1986, p. II/14), which states *"[i]f it is determined during project design that the best way to meet the management area goals of the Forest Plan conflicts with a Forest Plan standard, the Forest Supervisor may approve an exception to the standard for that project; such exceptions and the rationale therefore must be described in the project's documentation"* [Draft Decision Notice, p. 13].

This amendment is consistent with the National Forest Management Act which allows the responsible official to exempt certain activities to occur while not meeting Forest Plan standards 3 and 4a. [Draft Decision Notice, p. 13]:

> *"This site-specific amendment would not alter the long-term relationship between levels of multiple-use goods and services originally projected in the Forest Plan for wildlife habitat, Allowable Sale Quantity, or other resource outputs, nor does it have an important effect on the entire land management plan or affect land and resources throughout a large portion of the planning area during the planning period.*
>
> *Based on consideration of the four factors identified in the Forest Service Manual, 1926.51, and considering the Forest Plan in its entirety, exempting this project from Standards 3 and 4(a) of the Helena National Forest Plan would not be a significant change under NFMA to the Helena Forest Plan. This amendment is fully consistent with, but further refines and clarifies the means to achieve, current Forest Plan goals and objectives"* [Draft Decision Notice, Appendix B, p. 9].

The Forest concluded this project will remove some hiding cover, but the Forest would retain habitat components necessary to support the elk potential directed by the Forest Plan as evidenced by the current elk numbers Forestwide. They would also continue to achieve the objective of ensuring that viable populations of existing animal species are maintained (USDA 1986, p. II/17) [Draft Decision Notice Appendix B, p. 6].

Issue 2: The Forest Service did not complete an EIS, the appropriate form of environmental analyses.

Issue 2, Contention a: As part of the "hard look" analysis, an EIS must "fully address cumulative environmental effects or 'cumulative impacts.'"

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The 'hard look' test is used by the courts on the scientific rigor by which a specialist must demonstrate for the responsible official, the interested public, and the courts that the decision making process was adequately informed by disclosure of the anticipated environmental effects (including cumulative) and considered environmentally sound options. Some or all of the following key points were addressed in specialist reports: Assumptions, Inconsistencies, Methodologies, Contradictory Evidence, References Grounded in Science, and Clearly Stated Conclusions.

The results of this 'hard look' regarding significance are summarized in the draft Finding of No Significant Impact (FONSI). Item #7 specifically addresses whether the action is cumulatively related to other actions.

Resource specialist reports (see project record) contain detailed tables of past, present, and reasonably foreseeable actions. The project record contains the master list of cumulative effects that all specialists considered for their resource reports. The ID Team and responsible official have taken a hard look at the impacts this project would have. The Forest considered the cumulative effects, found they were not significant, and determined an EIS is not required.

Issue 2, Contention b: The cumulative impacts analysis must include more than general statements about possible effects or risk. "[S]ome quantified or detailed information is required. Without such information, neither the courts nor the public … can be assured that the [agency] provided the hard look that is required to provide." Te-Moak Tribe of Western Shoshone of Nev. v. U.S. Department of the Interior, 608 F.3d 592 (9th Cir.2010).

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The EA considered the cumulative impacts this project will have when combined with other past, present, and reasonable foreseeable projects (EA, pp. 9, 27 to 28, 33 to 35, 37 to 38, 54 to 55, 62 to 63, 72 to 73, 77, to 79, 83 to 84, 92 to 95, 104 to 107, 121 to 124, 130 to 132, 136, 141, 143, 144, 148, 151, 153, 156, 157, and 160). The responsible official has taken the required hard look at cumulative effects of the project. The analysis is in compliance with NEPA.

Issue 3: The Forest Service failed to take a hard look at the effectiveness of industrial logging, road building and prescribed burning to reduce sediment risk.

Issue 3, Contention a: The current aggregate fuel/fire hazard condition has not been displayed on a map. Nor has the post-project fuel/fire hazard condition and strategy been displayed on a map.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The project is not an "industrial logging" project. It is a very strategically placed fuel reduction project intended to protect the Red Mountain Flume and reduce wildfire effects on the reservoir. The project analyzed the impact to soil and the risk of sedimentation (EA, pp. 28 to 40). The hydrology analysis (p. 33) concluded the proposed activities were unlikely to lead to bank erosion, significant soil erosion, or sediment transport.

Issue 3, Contention b: The Forest Service has no long-term program for maintaining the allegedly lower-risk conditions after Project completion.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The Forest Service did outline throughout the analysis documentation the long-term expected vegetation conditions and maintenance treatments, such as hand thinning and under-burning in the future to maintain low fuel hazard conditions in the project area (EA, pp. 3, 26, 51 to 52; Draft DN and FONSI, pp. 10 to 11).

Issue 3, Contention c: The FS failed to disclose the purpose of individual treatment units.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The FS discloses the purpose for treatment units. Proposed units were selected because they are expected to accumulate heavy surface fuel loadings as dead trees fall. The large amount of dead fall would result in physical hazards to the flume structure and/or potential high intensity effects in the event of a wildfire, which could impair the functionality of the flume and/or reservoir (Draft DN & FONSI, pp. 1 to 2, 7; EA, pp. 3, 7 to 8, 50 to 51).

Issue 3, Contention d: What is the probability of each unit causing the exact same sediment risk?

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: It is difficult to predict the exact pattern of wildlife burn severity as well as the subsequent post-fire response on a unit-by-unit basis. The probability of post-fire sedimentation risk was evaluated for representative hillslopes in each treatment unit under three different burn scenarios. Values reported show a different (i.e. not "the exact same") sedimentation risk for each unit (EA, pp. 28 to 30; Hydrology Specialist report, pp. 6 to 8 [Please note: pages cited in specialist reports are as of the objection date. Potential editing of those reports, before the Decision is made, based on instruction in this letter and discussions during the objection resolution meeting may cause some page numbers to change]).

Issue 3, Contention e: *Why is "treatment" the same for each unit? (Optimum method?)*

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: Treatment categories (i.e., "*fuel break treatment*"; "*clearcut with leave trees*"; and "*intermediate harvest*") are the same for groups of units based on similarities in existing condition and objectives for the units in each group. For example, a clearcut with leave trees prescription would be applied to the units dominated by dead and dying lodgepole pine where

very few living trees are present. Under this prescription, varying amounts of surviving mature trees as well as small trees would be left depending on the existing condition of each unit. The analysis states that site-specific prescriptions would be developed for each unit to refine the treatment (EA, Appendix B, p. 11; Forest Vegetation Specialist report, pp. 46 to 49). The treatments proposed have been determined to be the optimum prescription based on forest ecology and existing condition using correct silvicultural terminology.

These methods of removing the heavy fuel loading in the watershed would reduce the probability of high-severity fire effects to soils, which commonly results in heavy erosion and sediment transport. A commercial harvest cost-effectively removes tons of heavy fuels from the drainage rather than piling and burning them on-site, with attendant costs and effects to soils (see EA, pp. 2, 7 to 9, 46 to 48, 50 to 51, 56, and 57).

Issue 4: The agency must look at the big picture in a cumulative effects analysis.

Issue 4, Contention a: A programmatic EIS must analyze risk issues on an appropriate landscape scale. No disclosure is an unacceptable response.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: In each specialist report, typically under the methodology section, a description of how the analysis was developed describes the parameters of the geographic 'scope' used in their direct/indirect analysis and the geographic 'scope' of their cumulative effects analysis.

In addition to the above geographic scope of a specialist's analysis, their cumulative effects also presented context regarding 'scale' to their analysis. Specialists were provided an interdisciplinary accumulation (including resource data bases) of the known past, present, and reasonably foreseeable actions that may or may not influence their resource. The team gathered these projects, listed them, and included a brief description for specialists to consider in context of possible impacts, regarding time and space of those effects. As I discussed in Issue 2b, the specialist did disclose potential cumulative impacts. The EA adequately considered direct, indirect, and cumulative effects at the appropriate landscape scale. An EIS is not needed to conduct this type of analysis.

Issue 4, Contention b: How will widespread vegetation changes affect fire behavior and soil stability relative to cumulative effects of past, present, and future clearcutting, roading, and prescribed burning when one of any number of fire scenarios plays out.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The project is designed to address fuel concerns immediately adjacent to the flume and reservoir in the event of a wildfire, should one occur. The impacts to vegetation (and consequently fire behavior) of past activities was taken into account in the existing condition. The impacts of ongoing and potential future activities were estimated narratively. Due to the size of the proposal, the cumulative effects to vegetation and fire behavior was assessed at the project area scale. At this scale, very few other treatments have or are planned to occur.

Given the high extent of canopy mortality which is already resulting in an increase of surface fuel loading, the potential for higher than normal surface heating from an untimely wildfire is expected. High surface temperatures would likely result in severely burned soil, which would lead to destabilization of the soil surface and erosion whereby soil productivity and function would be compromised (EA, pp. 35 to 39; Soil Resource report, pp. 7, 8, 11, and 13).

The changes in fire effects from the proposed action are displayed in both the Environmental Assessment (pp. 27, 54) and the Fuels/Fire Report (pp. 14, 26 to 27, and 30 to 36). Behave Plus (EA, pp. 23 to 25 and Project Record) was used to model the expected fire effects from the fuels conditions in the current, expected, and proposed Action Alternative within the project area.

Issue 4, Contention c: "When addressing amendments to a forest plan, cumulative impacts analysis must address forest-wide impacts because otherwise the Forest Service will amend Plan standards piecemeal, project after project, throughout the forest without ever having to evaluate the amendments' cumulative environmental impacts. NEPA does not permit piece-mealing. See: Native Ecosystems Council v. Dombeck 304 F.3d 886, 897 (9th Cir. 2002)." The Forest failed to adequately disclose cumulative effects of other plan amendments.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The Forest did consider the site-specific as well as the Forest-wide effects of the Forest Plan Amendment. Cumulative effects associated with other Forest Plan amendments has been evaluated in the 'Cumulative Effects of Other Forest Plan Amendments' section of the Site-Specific Forest Plan Amendment Red Mountain Flume/Chessman Reservoir Project [Draft Decision Notice Appendix B, pp. 6 to 8].

The Site-Specific Amendment analysis concludes the "proposal to exempt this project from Standards 3 and 4(a) should not affect the Forest's ability to realize the elk population potential established in the Forest Plan. When the Forest Plan Record of Decision was signed in 1986, the selected alternative was E-1. Alternative E-1 established Forestwide elk population potential for summer and winter range. In 1986, the Forest Plan summer range elk potential was 6,300 elk; the winter range elk potential was 4,000 elk. By decade 5, summer range elk potential in the Forest Plan was projected at approximately 6,200 elk and winter range elk potential at 3,200 elk (Forest Plan Record of Decision, p. 13, Forest Plan FEIS, pp. II/56-60). Based on aerial survey data collected by MDFWP staff, there are over 13,943 elk Forestwide within those hunting districts that overlap with the Helena National Forest. This is well in excess of the number of elk estimated at the time the Forest Plan was crafted and also in excess of that predicted for decade

5. While some of the elk in these hunting districts spend all or part of their time on non-Helena National Forest land, a considerable number of them—well in excess of 6,400—are part of the Helena NF population" [Draft Decision Notice Appendix B, p. 6]. The Forest continues to meet the Plan objectives for elk number and management.

Furthermore, with respect to Forestwide impacts to elk associated with multiple site-specific amendments, the Site-Specific Amendment analysis concluded that "[n]one of the past amendments has resulted in significant impacts to elk hiding cover and/or security... Cumulatively, effects to elk hiding cover from this and other site-specific Forest Plan amendments should not compromise the Forest's ability to provide habitat potential to meet Forest Plan elk population goals. Elk population viability would remain healthy and elk would continue to be well distributed throughout the Helena National Forest" [Draft Decision Notice Appendix B, p. 8].

The methodologies used to define hiding cover as well as the limitations and assumptions of those methods are described in the Wildlife Report and Biological Evaluation [pp. 10, 11, 13, Table 1 pp. 15 to 16]. The data used to validate the assumptions are derived from field surveys that measure hiding cover – i.e. the ability to hide 90% of an elk at 200 feet and are summarized in the Elk Hiding Cover Validation Surveys for the Red Mountain Flume/Chessman Reservoir and the General Tenmile Vicinity: Methods and Results [TenmileElkHidingCoverValidation]. These data were also used to validate the assumption that beetle-killed trees, while standing, would continue to provide functional hiding cover as described in the Draft Decision Notice Appendix B, p. 2:

> "The mountain pine beetle outbreak in the project area—and those herd units within which the project occurs—has resulted in canopy cover losses in the lodgepole pine stands. However, while these trees remain upright, they will continue to screen elk. For this reason, the 2005/2006 version of R1-VMap is assumed to accurately reflect the structure associated with 40% canopy cover even though some of that canopy cover has been lost. In other words, it's not practical to remove those stands from consideration as hiding cover just because the canopy cover has been lost. The pre-disturbance condition remains applicable for describing the functional attributes of hiding cover. This has been validated by field data [See the Tenmile Elk Hiding Cover Validation Surveys in the project record] as well as other studies that have relied on pre-disturbance vegetation characteristics to predict post-disturbance wildlife habitat (e.g. Russell et al. 2007). Furthermore, Smith and Long (1987) observed a well-defined relationship between elk hiding cover and high densities of lodgepole pine boles, conditions similar to the project area."

Additional references have been included in the Project Record that provide rationale and support for the use of pre-disturbance vegetation conditions as a determinant of post-disturbance habitat. (See Saab and others 2002 and 2009, Vierling and others 2010, Nappie and Drapeau 2011, and Latif and others 2013). The methodologies used to define security are described in the Wildlife Report and Biological Evaluation [pp. 16, 79 and Appendix A, pp. 1 to 3].

Issue 4, Contentions d and e: The FS fails to disclose that currently only 5 of 27 elk herd units meet Forest Plan Standard 4(a), and only 10 of 27 elk herd units meet Forest Plan Standard 3. Chronic violations of these standards represent a significant threat to the project area. Forest-wide non-compliance represents a significant change from Forest Plan management to maintain and improve elk and Big Game habitat.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The Red Mountain Flume/Chessman Reservoir Site-Specific Amendment is applicable to the elk herd units within which the project is located and that do not currently meet Forest Plan Big Game Standard 4(a) [Draft Decision Notice p. 3 and Draft Decision Notice Appendix B, pp. 1, 3]. Other elk herd units that occur across the Helena National Forest are not the subject of this amendment .

The Site-Specific Amendment analysis concludes that the *"proposal to exempt this project from Standards 3 and 4(a) should not affect the Forest's ability to realize the elk population potential established in the Forest Plan. When the Forest Plan Record of Decision was signed in 1986, the selected alternative was E-1. Alternative E-1 established Forestwide elk population potential for summer and winter range. In 1986, the Forest Plan summer range elk potential was 6,300 elk; the winter range elk potential was 4,000 elk. By decade 5, summer range elk potential in the Forest Plan was projected at approximately 6,200 elk and winter range elk potential at 3,200 elk (Forest Plan Record of Decision, p. 13, Forest Plan FEIS, pp. II/56 to 60). Based on aerial survey data collected by MDFWP staff, there are over 13,943 elk Forestwide within those hunting districts that overlap with the Helena National Forest. This is well in excess of that estimated at the time the Forest Plan was crafted and also in excess of that predicted for decade 5. While some of the elk in these hunting districts spend all or part of their time on non-Helena National Forest land, a considerable number of them—well in excess of 6,400—are part of the Helena NF population"* [Draft Decision Notice Appendix B, p. 6].

Furthermore, with respect to Forestwide impacts to elk associated with multiple site-specific amendments, the Site-Specific Amendment analysis concluded that *"[n]one of the past amendments has resulted in significant impacts to elk hiding cover and/or security... Cumulatively, effects to elk hiding cover from this and other site-specific Forest Plan amendments should not compromise the Forest's ability to provide habitat potential to meet Forest Plan elk population goals. Elk population viability would remain healthy and elk would continue to be well distributed throughout the Helena National Forest"* [Draft Decision Notice Appendix B, p. 8].

Issue 4, Contention f: The Forest Service's failure to provide quantified information on Forest Plan non-compliance of Standard 3 and 4(a) across the Forest violates NEPA.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The Wildlife Specialist Report identifies the cumulative effects boundary for the elk analysis as including the three elk herd units that overlap with the project area: Quartz, Jericho, and Black Mountain-Brooklyn Bridge [Wildlife Report and Biological Evaluation Figure 15, p. 92 and p. 95] and provides detailed information relative to Big Game Standards 3 and 4(a) for those herd units [Wildlife Report and Biological Evaluation, Table 6, p. 83; pp. 89 to 90; Table 8 p. 86; Table 10, p. 98; Table 12, p. 100; and pp. 103 to 104]. The Site-Specific Amendment provides quantified information on the status of those herd units [Draft Decision Notice Appendix B, pp. 3 to 6]. The Amendment also provides quantified information on the number of elk that overlap the entire Helena National Forest in order to determine consistency with Forest-wide goals and objectives and in order to determine viability in compliance with Forest Plan Direction (USDA 1986, p. II/17). The analysis is in compliance with NEPA and NFMA.

Issue 5: The Forest Plan amendment must be consistent with the best available science.

Issue 5, Contention a: There is no rationale as to how this amendment is consistent with the best available science.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The proposed amendment is a one-time, site-specific and project-specific exception applicable only to implementation of the decision for the Red Mountain Flume/Chessman Reservoir Project [Draft Decision Notice, p.1, 8, 11], [Draft Decision Notice Appendix B-Plan, p. 1]. The Forest is not replacing the existing Forest Plan standard.

The best available data—i.e. the most recent Montana Department of Fish, Wildlife and Parks elk survey data—were utilized to determine that the proposed amendment would not compromise the ability of the Helena National Forest to provide big game security, which is the intent of Forest Plan Big Game Standard 4(a) [Draft Decision Notice, Appendix B, pp, 9-11 and Table 7].

The Forest determined the amendment would not preclude the Forest's ability to achieve the goals and objectives as outlined in the Forest Plan. The goal, to maintain and improve the habitat over time to support big game and other wildlife species (USDA 1986, p. II/1), is being achieved through the retention of hiding cover elsewhere throughout the project area. The project is also in compliance with the Forest Plan Objective, which states the "management will emphasize…the maintenance or enhancement of elk habitat..." (USDA 1986, p. II/4) [Draft Decision Notice Appendix B, p. 6].

The draft Decision states, *"This site-specific amendment would not alter the long-term relationship between levels of multiple-use goods and services originally projected in the Forest Plan for wildlife habitat, Allowable Sale Quantity, or other resource outputs, nor does it have an*

important effect on the entire land management plan or affect land and resources throughout a large portion of the planning area during the planning period."

"Based on consideration of the four factors identified in the Forest Service Manual, 1926.51, and considering the Forest Plan in its entirety, exempting this project from Standards 3 and 4(a) of the Helena National Forest Plan would not be a significant change under NFMA to the Helena Forest Plan. This amendment is fully consistent with, but further refines and clarifies the means to achieve, current Forest Plan goals and objectives." [Draft Decision Notice Appendix B, p. 9].

Issue 5, Contention b: Since the Helena NF exempted itself from complying with its own standards for elk habitat—forest-wide big game standards #3 and #4(a), the default "best science" is Hillis (security) and Christensen (habitat effectiveness). Objectors insist that the agency comply with the Hillis and Christensen standards: there are no other objective and quantifiable standards in effect to protect elk habitat in this project area.

The project area fails both Forest Plan standards for elk habitat, fails the Hillis standard for security, and fails the Christensen standard for habitat effectiveness. The project area fails all available objective, quantifiable standards for determining whether or not elk and big game habitat is abundant.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The Forest recognized that Christensen and others (1993) describe habitat effectiveness for elk and provide recommended thresholds. They also recognize that Hillis et al. (1991) provide recommended thresholds for elk security during the hunting season. The Forest considered these analyses. The Forest also analyzed the effects of the proposed project activities on the Forest's ability to achieve Forest Plan Standards 3 and 4a [Wildlife Report and Biological Evaluation pp. 81, 83 to 87, 94 to 96, 98 to 101; Draft Decision Notice Appendix B, p. 3].

Measures are in place to protect elk habitat in the project area. Big Game Standard 6 (USDA 1986 p. II/19 and C/1-11) requires that the recommendations of the *Montana Cooperative Elk-Logging Study* (Forest Plan Appendix C, pp. C/1-11) be followed during timber sale and road construction projects [Wildlife Report and Biological Evaluation, pp. 104 to 106]. Design elements provide additional quantifiable protections [Wildlife Report and Biological Evaluation pp. 141, #3].

Your objection contends that the elk analysis 'fails the Hillis standard…and fails the Christensen standard…' when in actuality all three herd units are at 50% or more habitat effectiveness [Wildlife Report and Biological Evaluation, p. 99] which is in line with the habitat effectiveness recommendations from Christensen et al. (1993). All three herd units are also at or above 30% security which is in line with the recommendations in Hillis et al. (1991) [Wildlife Report and Biological Evaluation p. 85].

Finally, in a recent court order—Alliance for the Wild Rockies, Native Ecosystems Council Plaintiffs vs. Faye Kruger, Regional Forester of Region One of the U.S. Forest Service…CV 12-150-M-DLC—the Forest prevailed on the contention that the Forest was required to adopt Hillis and Christensen in lieu of a site-specific amendment. The District Court found that Plaintiffs failed on their claim that asserted Christensen and Hillis became the new standards for the project instead of the amendment standards [pp. 39 to 41]. "The purpose and intent of a Forest Plan Amendment would be destroyed if the Forest Service was nonetheless required to comply with any studies cited in the EIS" [p. 41].

Issue 6: The EA fails to adequately assess and disclose direct and cumulative impacts to water quality.

Issue 6, Contention a: Clearcut logging, road building, and burning are not the only activities that have significant adverse impacts to water quality. This is the proverbial "mere listing" of cumulative impacts, not a proper analysis required by NEPA.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: Existing cumulative impacts were discussed in the project documentation (EA, pp. 33 to 35; see also Hydrology Specialist Report in project record). The relevant matter is whether the proposal would add to those cumulative effects. The Hydrology analysis and report conducted an effects analysis in order to determine whether the proposed project would add to those existing cumulative effects. Findings indicated that there would be no net increase (actually, there would be a net reduction) in anthropogenic sediment loading to project-area water bodies due to the application of resource protection measures in activity areas, and road improvements in the project area.

Issue 6, Contention b & k: Nobody wants livestock grazing in a municipal reservoir. The EA scarcely addressed the grazing allotments in the project area. The FS has failed to adequately quantify and disclose the cumulative effects of these grazing allotments on soil and water quality.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The proposed project does not affect any ongoing livestock grazing, but does consider the cumulative effects of grazing. Grazing impacts a very small area of the project area (EA, Appendix C, Response to Comments # 60). The EA disclosed the effects of grazing on soils and water (EA, Appendix C, Response to Comments # 107). Cumulative effects of grazing impacts are discussed in the Wildlife, Soils, and Vegetation Specialist reports, and the Hydrology Specialist Report addresses cumulative impacts of cattle in the Chessman reservoir drainage. While small portions of three grazing allotments overlap the Chessman Reservoir catchment,

these allotments have not been in use in recent years. However, there have been trespass cattle from outside of the drainage, which are passing through several breaches in boundary fences caused by deadfall of beetle-killed trees.

An indirect effect of the project would be the reduction of trespass opportunities (once fences are repaired) due to the removal of most dead trees around project-area fences—this will be added to the specialist report. However, the objector has presented a valid concern about potential threats to water quality (e.g. if cattle grazing were to continue on these pastures at some point in the future) even if they are largely unrelated to the proposed action. The Wildlife Specialist Report included a suggestion to move one of the allotment boundary fences to the divide above the reservoir—this effort will be expanded to include closure of all allotment pastures within the reservoir catchment.

In addition to closure-to-grazing and fencing of the reservoir catchment, the project proposal will also include the repair and any necessary expansion of existing fences where trespass issues currently exist. The inclusion of these measures would add to the positive cumulative water quality effects of the project.

Issue 6, Contention c: OHV, ATV and 4-Wheeler activity is not disclosed in any meaningful, quantitative method.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: As per the Forest Plan, the project area does not include any motorized (ATV, UTV, or 4-wheeler) system trails. A separate project implemented in August 2013 (Chessman Area Road Decommissioning Project) obliterated 3.4 miles of unauthorized road in the project area. The road obliteration project was done as part of the broader effort of protecting water quality in the project area. Surveys of unauthorized routes in the Upper Tenmile watershed have been done every summer for the past four years, and new routes turn up periodically. Removing these routes from the landscape is effective and important to water quality concerns—road obliteration projects on these and other routes in the area would commence following completion of the Divide Travel Plan Decision.

Issue 6, Contention d: The FS failed to solicit and disclose comments from the Montana Department of Environmental Quality.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: Comments were solicited from the Montana DEQ via e-mail on April 30, 2013. A DEQ representative from the non-point source group (Robert Ray) participated in a field review of the project area with Forest personnel on May 24, 2013, and did not express any reservations at that time, nor did he submit any written feedback subsequently. Documentation of this

communication was left out of the initial project record—it will be added. Following receipt of your objection, the DEQ was again contacted by telephone and e-mail—a request for any feedback not given in earlier communications was presented. To date, no response has been received to the most recent request. This communication and the anticipated response will be added to the project record.

Instruction to the Forest: The communication with DEQ should be added to the project record.

Issue 6, Contention e: "Roads are typically the #1 contributor of sediment into streams and reservoirs. No disclosure of the current aggregate, pre-project, and post-project road densities for all properties was included in the Project EA."

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: Post-project road density in the analysis area would not differ from pre-project road density, as the project does not include any road decommissioning or building of permanent roads. As mentioned in the response to Issue 6, Contention c, road obliteration is important for the Helena National Forest in the Upper Tenmile watershed, although the bulk of that work requires completion of the Divide Travel Management Plan Decision, anticipated in 2014. However, pre and post-project sediment loading from the existing road network was estimated in the Hydrology Specialist Report.

Issue 6, Contention f: "The FS didn't disclose records of compliance with its water quality monitoring requirements as set forth in its Forest Plan."

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: A record of compliance with Forest Plan-mandated water-quality monitoring is found in the annual Forest Plan Monitoring Report. This document was not part of the initial project record as it was not cited in project documentation—it will be added.

Instruction to the Forest: Add the Forest Plan Monitoring Report to the project record.

Issue 6, Contention g: Assumption 1. "A wildfire in the absence of the proposed treatments would have higher-severity impacts to soils than proposed prescribed burning or pile burning." This is not categorically true. For example, a small fire in June, or in September, could very easily have less impact on soils in the Project area than 490 acres of clearcuts, 0.5 miles of new road construction, and prescribed burning over hundreds of acres.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: This project was designed to reduce the likelihood of a widespread, high-severity-effects wildfire, which have a higher probability of occurring under current fuels conditions than in post-project conditions.

Assumption 1 is not an accurate description of the purpose and need of the proposed project. The EA (p. 2) states that the purpose of the project is "to reduce the likelihood of physical damage to the municipal watershed infrastructure (flume and reservoir) in the event of a wildfire or from falling dead trees." Therefore, this project was designed to reduce the likelihood of a widespread, high-severity-effects wildfire in the project area, which has a higher probability of occurring under current fuels conditions than in post-project conditions.

Issue 6, Contention h: Assumption 2. Road improvement (new drainage features, gravel application) may result in elevated erosion shortly after installation, but will remain effective in reducing sediment delivery over a period of at least five years." This implies that road improvement are needed every 5 years. It appears that the FS has been operating roads out of compliance for some time.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: Road maintenance is not an "undisclosed purpose and need." There has been road maintenance done in the project area within the last five years. Road maintenance occurs in part because it is a standard requirement of Forest Service logging contracts, and in part because the project provides a funding opportunity to improve road conditions.

Issue 6, Contention i: Assumption 3. The proposed temporary road segment would not develop sediment delivery without hydraulic connection to any body of water or wetland. If the road is without hydraulic connection how does Unit 15 relate to the purpose and need?

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The assumption should have been more clearly stated to include "in the absence of high-severity-effects wildfire." If a wildfire were to cause large areas of high-burn-severity effects to soils anywhere in the Chessman Reservoir catchment, including Unit 15, those areas would have a high probability of generating large volumes of ash and eroded sediment which are generally transported downslope to a low-gradient area in the landscape. In such an event, most sediment carried downslope from Unit 15 might be expected to settle out in the wetland area at the southern end of the reservoir. While this portion of the sediment-laden runoff would certainly impact the wetland, it might not directly impact the reservoir. However, such an event would have a higher probability of carrying ash and fine sediment to the reservoir, which would impact water quality and the ability of the City's treatment plant to effectively treat the water for municipal use. The temporary road could also pose an erosion risk in the event of high-severity

wildfire effects in its immediate vicinity, although given its ephemeral existence on the landscape, and the substantial reduction of heavy fuel loading in its vicinity (facilitated by its temporary presence and use), the likelihood of such effects occurring while the road was in place is small.

Issue 6, Contention j: We object strongly to the following proposed actions: There is no excuse for allowing heavy logging equipment in Beaver Creek. The area is part of the Lake Helena TMDL because it is not meeting water quality standards. The EA fails to adequately disclose "chronic" condition that exists. The cumulative impacts will add more sediment.

Suggested Remedy: No specific remedy was suggested for this contention.

Resolution: No resolution was reached.

Response: The water quality impairments in project area streams are described in the Existing Conditions section of the Hydrology Specialist Report (p. 6, 9, and 10). The ford to be used in Beaver Creek is an existing ford on an open road. The project would provide a funding opportunity to improve this ford and the road that would result in a substantially lower sediment load in Beaver Creek, despite temporary use by logging trucks. The predicted load reduction from project improvements at this site was documented in the Hydrology Specialist Report and the EA (pp. 28 to 30). Two to three other proposed crossings for skidding logs are on stream reaches where flow is controlled by City of Helena headgates. The ability to restrict flow, combined with other resource protection measures outlined in the Hydrology Specialist Report and the EA, would result in negligible sediment delivery at these sites. Thus, the direct (and cumulative) impact of this project would be a reduction in anthropogenic sediment loading to Beaver Creek. The proposed crossings have already been approved through the SPA 124 permitting process by Montana FWP, and US Army Corps of Engineers has given preliminary approval. Additionally, HNF personnel accompanied the Montana DNRC state forester to the proposed site crossings on two occasions in order to ensure compliance with Montana SMZ law.

Additional information added during the Resolution meeting.

During the resolution meeting you requested, and I agreed, to allow you to add a new document to the project. I have reviewed the *Open Letter to Members of Congress from 250 Scientists Concerned about Post-fire Logging*, dated October 20 2013, which you supplied. It is clear to me that this letter is concerned with the management of forests ***after*** they have burned, and potential legislation concerning logging of post-fire habitat. The literature the *Letter* cited also concerns management after a fire. The Red Flume project is concerned with management ***before*** a fire and reducing the likelihood of physical damage the infrastructure in the event of a wildfire. The project is not dealing with an already burned landscape, as the *Letter* discusses, nor is it trying to prevent a wildfire. Instead, the Flume project is trying to mitigate, before the fact, the potential impacts that falling trees and a potential wildfire would have on Helena's municipal watershed infrastructure.

Instruction to the Forest: I am instructing the Forest to include this Letter in the project record and to consider it in light of the Red Mountain Flume Chessman Reservoir Project's purpose and need.

SUMMARY

In conclusion, I have reviewed your assertions that the project violates various environmental laws and regulations and the Forest Plan. The project is in compliance with all laws, regulations, and the Forest Plan, as amended by the site-specific, project specific amendment for elk habitat. Based on my review, I am instructing the Forest to: 1) review the *Open Letter to Members of Congress from 250 Scientists Concerned about Post-fire Logging* in light of the project's purpose and need; 2) add to the project record any further communication with DEQ concerning the Red Mountain Flume Chessman Reservoir Project; 3) add the Forest Plan Monitoring Report to the project record as I discussed above in Issue 6, contention f; and 4) ensure the list of references and literature attached to this letter, which were used during the objection review, are included in the project record. I also have additional instructions to the Forest based on my review of another objection. Those instructions are to review the research by Proffitt et al. (2013) submitted by Sara Jane Johnson in light of the project and to complete programmatic consultation with USFWS on grizzly bear south of U.S. Highway 12. Once these instructions are completed the Forest may sign the Decision Notice for the project. I hope you will continue to work with the Forest on projects and Forest Planning.

Sincerely,

JANE L. COTTRELL
Deputy Regional Forester

cc: William Avey, Jennifer J Woods, Jan Fauntleroy, Heather R Degeest, Ray G Smith, Allen Byrd

AGENCY LITERATURE AND REFERENCES
FOR
AGENCY OBJECTION RESPONSES
RED MOUNTAIN FLUME CHESSMAN RESERVOIR
DECEMBER 2013

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